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# **PLAN OF WORK**

**COOPERATIVE AGRICULTURAL RESEARCH CENTER**

**COLLEGE OF AGRICULTURE AND HUMAN SCIENCES**

**Fiscal Year 2000-2004**

**Prairie View A&M University**

**Prairie View, Texas**

**July 1999**

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## COOPERATIVE AGRICULTURAL RESEARCH CENTER

### OVERVIEW

The Cooperative Agricultural Research Center (CARC) is the organizational unit within the college of Agriculture and Human Sciences at Prairie View A&M University, originally established as an agricultural experimental substation in 1947, with assigned administrative and managerial responsibilities research in the food and agricultural sciences. The Center serves to coordinate research activities in four major areas: Animal Systems, Food Systems, Plant and Environmental Systems, and Socioeconomic and Family Systems.

The **mission** of the Cooperative Agricultural Research Center is:

To conduct basic and applied research in the Agricultural, food and social sciences to produce research information and technological developments which improves the socio-economic conditions

to participate in and contribute to the University's land grant mission of teaching, research and service by developing and transferring scientific information, technical competencies, and human capital in the food and agricultural sciences.

The **vision** of the Cooperative Agricultural Research Center is to respond to the needs of agricultural producers, extension agents, government agencies, scientists, students, faculty, and the private sector to ensure that the best research information and technology is being developed.

The **philosophy**: **Together We Make a Difference**

## BACKGROUND

The AREERA of 1998 amended the Hatch Act of 1887, the Smith-Lever Act of 1914, and sections 1444 and 1445 of the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (NARETPA) to require plans of work to be received and approved by CSREES prior to the distribution of funding authorized under these Acts. The collection of information includes 3 parts: the submission of a 5-year plan of work every five years; the submission of an annual update of the 5-year plan of work, if applicable; and, the submission of an annual report of accomplishments and results.

This Act also amended the Hatch Act to redesignate the Hatch Regional Research Fund as the Multistate Research Fund specifying that these funds be used for cooperative research employing multi-disciplinary approaches in which a SAES, working with another SAES, USDA/ARS, or a college or university, cooperates to solve the problems that concern more than one State. The Smith-Lever Act was amended to require that each institution receiving funds under Sections 3(b) and (c) of the Act expend funds for multistate activities in FY 2000 and thereafter, a percentage of these funds equal to the lesser of 25 percent or twice the percentage of funds expended by the institution for multistate activities during FY 1997.

The AREERA further amended both the Hatch and Smith-Lever Acts to require that each institution receiving agricultural research and extension formula funds as noted above, expend for integrated research and extension activities in FY 2000 and thereafter, a percentage that is at least equal to the lesser of 25 percent or twice the percentage expended for these activities in FY 1997. In addition to descriptions of planned programs including multistate activities and integrated research and extension activities, the 5-year plan of work must include information on:

1. How critical short-term, immediate, and long-term agricultural issues are addressed in research and extension programs;
2. How the State or eligible institution has developed a process to consult users of agricultural extension and research (stakeholders).
3. How the State or eligible institution has made efforts to identify and collaborate with other universities and colleges.
4. The manner in which research and extension, including research and extension activities funded other than through formula funds, will cooperate to address the critical issues in the State.
5. How research and outreach programs already underway convey available research results that are pertinent
6. Descriptions of the merit review and/or scientific peer review processes used.

This Plan of Work is a comprehensive statement of the Agricultural Research activities for the next five

years, as required by the Agricultural Research, Extension, and Education Reform Act of 1998 (AREERA), and as allowed under the USDA's "Guidelines for Land Grant Institution Plan of Work". This plan is based on the Plan of Work Guidelines as noted and its current Strategic Plan.

This Plan of work has adopted, by reference:

1. The Southern Region Plan of Work for fulfillment of obligations to the AREERA's multi - state, multi-disciplinary
2. The Texas A&M University System procedures for reporting Civil Rights compliance and Equal Employment Opportunity
3. The National Standards for Merit and Peer Review.

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## PLANNED PROGRAMS

	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
1890 Research	Program 1	Program 2	Program 2	Program 3	Program 4
	\$8,226,662	\$3,097,214	\$3,097,213	\$4,086,425	\$813,428

**Goal 1: An agricultural system that is highly competitive in the global economy.**

**PROGRAM 1: Animal Systems**

**Statement of Issue:**

The overall goal of the Animal Systems Research Program is to increase the efficiency of producing food from animals. This will be accomplished through research activities which generate scientific and technical information on animal production systems that are applicable locally, nationally and internationally. Key research areas are designed to improve scientific understanding of physiological mechanisms affecting reproduction, growth and performance. These understandings are crucial for development of efficient production practices and promotion of a healthy and competitive livestock industry in Texas. Application of this science-based information will allow development of humane and cost-effective production practices which promote animal well-being and minimize stress. It is also necessary to produce animals which provide consumers with the quality meat, milk and poultry products they desire at an affordable cost. High production efficiency and lean growth are critical elements for expanding local and national markets and effectively competing in global markets.

**Performance Goals:**

1. To develop recommendations for interventions which maintain optimal herd health and profitability in the Texas Gulf Coast Region.
2. To determine the effect of new genetic inputs on carcass quality and marketability.
3. To establish forage-based management practices that increase farm animal production efficiency and well being.
4. To increase reproductive efficiency and animal well being by reducing early embryonic losses.
5. To enhance public understanding of the concepts of animal well-being and the physiological basis for animal growth, reproduction, and cost effective production.

**Output Indicators (activities):**

1. Determine the efficiency of farm animal production systems through a combination of altered management practices and computer systems analysis.
2. Determine the usefulness of various forage based production systems and establish farm profit margins.
3. Enhance market/consumer acceptance of least cost produced meat, dairy and poultry products.
4. Better understanding of genetic and physiological mechanisms which influence reproduction and growth of food producing animals.

**Outcome Indicators (results):**

1. Improved reproduction efficiency and improved conditions for optimal growth and well -being of farm animals.
2. A decision making computer model that will allow producers to quickly and easily evaluate alternative management systems and maximize production efficiency.
3. Greater producer understanding of production economics and profit margins.
4. Greater public understanding of the principles of animal behavior, animal responses to their environment, and the biology of reproduction and growth.
5. Increased farm income and profitability.
6. A more competitive livestock industry in Texas.
7. A 25% increase in peer reviewed publications.
8. A 25% increase in competitive grants received by Faculty and Staff in the Animal Systems Group.
9. A 25% increase in graduate student enrollment in Animal Science Programs.

**Key Program Components:**

1. Develop a model of nutrient utilization and body composition in goats based on concepts of total body DNA, protein and lipid masses.

2. Develop empirical equations to predict major carcass cuts from empty body protein and lipids.
3. Develop models to quantify the impact of physical resources and climate on production. An engineering module will model the impact of physical resources and climate on the animal and forage production.
4. Quantify the impact of the socioeconomic environment on decision making. A socioeconomic module will be developed to address factors such as input costs and output prices, market conditions, consumer tastes, health and dietary considerations and worker's welfare.
5. Develop a herd health module to predict the impact of herd health programs and diseases on production efficiency.
6. Determine cost effective ways to produce genetically superior stock on small acreage.
7. Develop methods that will improve reproductive efficiency of farm animals and improved conditions for growth and well-being of animals.
8. Define endocrine and paracrine mechanisms which regulate uterine receptivity and support conceptus growth, endometrial attachment and placentation.
9. Identify components of the conceptus trophectoderm which interact with recognition molecules on endometrium, promote stable cell-cell interactions and facilitate placentation.

**Internal and External Linkages:**

The Cooperative Extension Program at PVAMU

The Department of Agriculture, Nutrition and Human Ecology at PVAMU

1862 and 1890 Land Grant Institutions

Texas Agricultural Experiment Station

Texas A&M University

Texas A&M University System institutions

Texas Medical Center in Houston

**Target Audiences:**

Livestock producers, the public, the scientific community, extension personnel, faculty and students.

**Program Duration:**

Five years

**Resource Allocation:**

	FY1999 (Base)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Evans-Allen/ State Match	\$1,134,673	\$1,475,095	\$1,645,306	\$1,702,043	\$1,702,109	\$1,702,109
SYs	23.00	25.00	26.00	26.00	26.00	26.00

**Goal 2:** A safe and secure food and fiber system and a healthy, well nourished population; and

**Goal 3:** A Healthy, well-nourished population.

**PROGRAM 2: Food Systems**

**Statement of Issue:**

Texans, as well as people from other regions, and the nation, want a high quality, safe, and nutritious food supply that can maintain a healthy status and reduce the risk of illnesses and chronic diseases. The food supply must contain products that are free of pathogens and risk. It must be adequate to sustain adequate growth and development from infancy to adulthood. The capability to meet this demand is determined by product development and food technology, understanding cultural diversity and its associated factors, and improved production and distribution of foods. Research in the Food Systems Program will further the understanding and significance of food quality, safety, nutrition and health that will enhance the quality of life through better food and lifestyle choices and a safer food supply.

**Performance Goals:**

1. To develop new and /or improved food products that will enrich the food supply.
2. To increase the understanding of food and nutrition in relation to safety, health and disease.
3. To improve the safety of our food supply.
4. To contribute to the human resource pool of professionals in the food, agricultural, and nutritional sciences.

**Output Indicators (activities):**

1. A 1% increase in the development of technology that will improve the nutritional quality and acceptability of value-added goat products.
2. A 2% increase in the development of technology that will reduce or eliminate the risks of food-borne illnesses.
3. A 1% increase in patented or licensed value added goat meat and milk products.
4. A 1% increase in patented or licensed technology for the reduction or elimination of food pathogens &/or toxigens or other hazards.

5. A 25% increase in the total number of presentations, seminars and/or workshops presented annually.
6. A 25% increase in the total number of articles published in refereed journals.
7. A 25% increase in the total number of internally and externally funded multi - disciplinary and/or multi-program research projects in food, agriculture and nutrition.
8. A 10% increase in the total number of formal and informal education and training programs for nutritional, health and food safety risks.

### **Outcome Indicators (results):**

1. Improved share of local and regional markets for goat milk or meat value-added products.
2. Increased availability of knowledge to improve strategies for better consumer food choices.
3. Extended shelf life of foods.
4. Effective environmental friendly biocontrol and acceptable chemical methods managing pathogenic and toxigenic substances in the food supply.
5. Effective use of HAACP locally and regionally.
6. Increase in the number of undergraduates students actively participating in basic and applied research projects.
7. Increase in the number of students entering Master of Science or Doctoral programs.
8. Increase in the number of students placed in jobs requiring degrees in food science, agricultural and nutritional science.
9. The total number of participants meeting established goals upon completion of non-formal education program for nutritional, health and food safety risks.

### **Key Program Components**

#### Research Efforts to focus on:

1. detection of chemical, physical and pathogenic hazards that are being introduced in the food system.

2. development of new techniques to reduce and eliminate pathogens and toxins (i.e. cost-effective biocontrol method via ion metals manipulation, use of natural microorganisms and other agents to antagonize growth of pathogens and/or toxigens).
3. production, distribution and handling of food supply.
4. development of strategies to reduce nutritionally related disease or health problems.
5. response of animal tissues to challenged environment.
6. enhancement of biotechnology in animal science as it relates to food safety and nutrition.
7. continuing partnerships with USDA/ARS.
8. development of better quality and more acceptable food products.
9. efficient utilization of produce from dairy farms and supply of dairy -based food ingredients for incorporation into other food systems.
10. reflection and examination of the impact of past research advances in order to chart future directions and to make relevant recommendations for research activities.

**Internal and External Linkages:**

The Cooperative Extension Program at PVAMU

The Department of Agriculture, Nutrition, and Human Ecology at PVAMU

The College of Arts and Sciences - Departments of Chemistry & Biology at PVAMU

1862 and 1890 Land Grant Institutions

Texas Agricultural Experiment Station

Texas A&M University System institutions

USDA - Agriculture Research Service, National Agricultural Library, NADC

Food Industry

**Target Audiences:**

consumers (special attention devoted to traditionally underserved and unserved sectors in rural and urban areas)

professional individuals  
 scientific agencies and special interest groups

food industry (including personnel in distribution, purchasing, receiving and storage)  
 students

personnel in custom exportation and importation

**Program Duration:**

Program goals are set to be completed in 5 years

**Resource Allocation:**

	FY1999 (Base)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Evans-Allen/ State Match	\$854,431	\$1,110,746	\$1,238,904	\$1,281,624	\$1,281,578	\$1,281,578
SYs	14.85	15.85	15.85	15.85	15.85	15.85

**Goal: 4: An agricultural system which protects natural resources and the environment.**

**Program 3: Plant and Environmental Systems**

**Issue Statement:**

The production of crops provides income for many Texas families. Poor management of nutrients can result in soil infertility or accumulation of toxic substances in the soil. Excessive applications of nutrients are a source of inefficiency and cost for the producer as well as a potential source of contamination of water supplies. Also, as a result of the great economic development of Texas based on both chemical and agri-chemical industries, soil and groundwater have been exposed to a variety of synthetic chemical and toxic metal wastes thus threatening public health and sustainability of the natural resource systems. In addition to man-made chemical pollutants, there are also natural contaminants (mycotoxins) in crops and soils. Toxic waste management by bioremediation and biodegradation, fundamental molecular biology of the response of plants to the chemical and physical environment, and environmentally sustainable agricultural practices will be the focal points of this research program.

**Performance Goals:**

1. To increase the base of scientific research and knowledge on fundamental plant and environmental sciences, especially for the conservation and protection of soil and water resources in land uses.
2. To develop bioremediation technologies that protect and sustain soil and groundwater quality for agriculture and/or land use.
3. To improve the harmony between crop production practices and the environment through minimization of nutrient emission while optimizing crop yields.
4. To reduce the reliance of Texas farmers on organic pesticides through integrated pest management practices.
5. To increase the awareness, understanding and information among agricultural producers regarding the agricultural production practices that protect ecosystem on or adjacent to agricultural production sites.
6. To increase the research and knowledge base on topics related to reducing the risk of pathogenic and toxigenic fungi and their mycotoxins in crops and soils.
7. To encourage student participation in the research projects.

**Output Indicators (activities):**

8. Novel techniques which are more environmentally benign than current tactics to reduce nutrient emission and toxic chemical pollution of the environment.
9. More research projects on plant and environmental sciences.
10. Improved nutrient and pesticide management recommendations for crop producers.
11. More research publications (including books and book chapters) in the most respected scientific journals and other refereed materials on environmental sciences and related issues.
12. Greater understanding of plant biochemical processes.
13. Number of people aware of formal and non-formal educational programs on topics related to wetland protection, and water management practices.
14. Biodegradation effects on mycotoxin production, fungal RNA and DNA properties, and fungal growth.

**Outcome Indicators (results):**

15. More disclosures, and licenses annually filed for environmental protection technologies related to soil, groundwater and crops adjacent to agricultural sites and other land uses.
16. New and more basic and applied knowledge in bioremediation of organic and inorganic toxic wastes.
17. More technologies and procedures for natural agents that reduce environmental risk.
18. More rational/efficient use of agricultural chemicals by crop producers.
19. More crop producers adopting practices to minimize fertilizer and organic pesticide use.
20. Reduce incidence of pests/diseases and increased crop quality and yield, while reducing the residues of organic pesticides.
21. Increased crop production per unit of input (e.g. land, fertilizer, and (pesticides) with decreased environmental risks.
22. Reduction in daily exposure of humans and animals to pesticides and toxic chemicals.

23. Effective biodegradation and bioregulation of pathogenic and toxigenic fungi and reduction of mycotoxin contamination in crops and environment.
24. Application to crop production of the fundamental scientific advances in bioremediation and plant sciences.
25. Reduced percentage of wetland plant species currently at risk of extinction.
26. Reduced percentage of wetlands and assessed waters impaired by nutrients, organic enrichment, pathogens, and pesticides.
27. Increased percentage of graduate students on environmental quality research projects.

**Key Program Components:**

28. Improved understanding of bioremediation of toxic wastes in the soil and groundwater.
29. Use of electromigration technique to mobilize toxic chemicals and metals in groundwater and soil.
30. Cost-effective bioregulation technology with natural agents and/or in association with conventional methods.
31. Use of natural microorganisms and other natural agents from plants to antagonize pathogenic and toxigenic fungi and mycotoxins in the environment.
32. Basic and applied research conducted in the laboratory, greenhouse, or field and addressing
  - a). Sustainable management of nutrients, and
  - b). Response of crops to nutrients and pesticides.
33. Extension demonstration of successful pesticide and fertilizer management of cropping systems.
34. Increasing the production efficiency and competitiveness of Texas agricultural industry through nutrient and pesticide management systems that minimize abiotic and biotic stresses affecting plants.
35. Development of systems for improved monitoring of nutrient residues in the ecosystem.
36. Understand the plant genome to discover new genetic elements that enhance crop productivity.
37. Understand how the interactions between crops and their environments influence crop yield.

38. Increase public adoption of land use practices that protect wetlands, and conserve and/or protect surface and groundwater supplies.

**Internal and External Linkages:**

The Cooperative Extension Program at PVAMU

The Department of Agriculture, Nutrition and Human Ecology at PVAMU

USDA - Natural Resource Conservation Service

The Texas Park and Wildlife Service

Texas Agricultural Experiment Station

Texas Agricultural Extension Service - County personnel

Arkansas Agricultural Experiment Station

Stephen F. Austin State University, Texas

The Environmental Protection Agency

National Aeronautical Space Administration (NASA)

Private Sector Companies

**Target Audiences:**

The results of the research program will benefit crop growers especially on less than 200-acre farmlands of under-served families. In addition, consumers, food industry, the agri-industry, petro-industry, personnel in grain storage and export facilities, government agencies, and environmental companies will benefit from the research program.

**Program Duration:**

Five years

**Resource Allocation:**

	FY1999 (Base)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Evans-Allen/ State Match	\$563,654	\$732,745	\$817,291	\$845,473	\$845,458	\$845,458
SYs	9.35	9.85	10.85	10.85	10.85	10.85

**Goal 5: Enhanced economic opportunities and Quality of Life for Americans**

**Program 4: Socioeconomic and Family Systems**

**Statement of Issue:**

The structure of American Agriculture and Rural America is greatly impacted by the dynamics of change which include technologies (information, mechanical, etc.), family structure and function, and global economics. In order to support individuals, families and communities, especially rural communities, in adapting to change, new strategies and techniques must be employed to address these issues. Strategies that enhance the economic health of families and rural communities must be a priority. Research in social sciences is required to meet the needs and challenges of an expanding and more complex set of stakeholders involved in agriculture, natural resource use, and environmental protection and enhancement. The potential problems and opportunities resulting from the multifaceted dynamics of change and how these changes impact the socioeconomic well-being of individuals and families, must be systematically analyzed for their strategic importance to the life quality of Texans.

Emerging issues in Texas agriculture converge around economic and social well-being. The issues of family well being, child care, and literacy and human capital development are especially important. Growing urbanization of Texas and the decline of rural communities and their infrastructure will continue to pose problems that demand new solutions through research. The North American Free Trade Agreement and other trade resolutions offer special challenges to agriculture in Texas. Most major Texas commodities such as rice, sugar, peanuts, cotton, cattle, etc., are closely tied to global pricing and trade. Any changes in world commerce will have an accentuated impact on Texans.

**Performance Goal:**

To increase the capacity of individuals, families and communities to enhance economic well-being and improve their quality of life.

**Output Indicators (activities):**

To annually increase the research-based knowledge generated and made available through the work of CARC personnel, partners and cooperators to individuals, families, and communities which contribute to their economic well-being and improved life quality.

**Outcome Indicators (results):**

1. To annually increase economic opportunities in communities through economic development programs in which CARC personnel, partners and cooperators play an active research, education, and/or extension role.
2. To strengthen the capacity of higher education programs at Prairie View A&M University and other cooperating institutions to develop future scientist, professionals, and leaders in family, consumer, and community economics who will more effectively contribute to greater understanding of socioeconomic and family issues.
3. To contribute to meeting the annual market demand for individuals formally educated and trained at institutions of higher education as scientists, professionals, and leaders in family, consumer, and community economics and related disciplines.
4. To annually increase through mentoring and leadership development the incidence of caring individuals and communities resulting from non - formal education programs in which CARC, personnel, partners and cooperators play an active research, education, and/or extension role.
5. To annually increase the incidence of strong families resulting from non - formal education programs in which CARC, personnel, partners and cooperators play an active research, education, and/or extension role.

**Key Program Components:**

Collection, analysis, dissemination, and evaluation of both primary and secondary data.

**Internal and External Linkages:**

Cooperative Extension Program at PVAMU

Department of Agriculture, Nutrition and Human Ecology at PVAMU

Division of Social Work, Behavioral and Political Science at PVAMU

Texas A&M University System institutions and agencies

U.S. Department of Health and Human Services - Office of Minority Health

Texas Department of Agriculture

## U.S. Department of Commerce

**Target Audiences:**

Individuals, families, and their communities, and identified groups and organizations traditionally bypassed and/or historically unserved and underserved at the local, state, regional, national and international levels having identified needs consistent with this program component.

**Program Duration:**

Intermediate.

**Resource Allocation:**

	FY1999 (Base)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Evans-Allen/ State Match	\$112,200	\$145,859	\$162,688	\$168,297	\$168,292	\$168,292
SYs	1.67	2.37	2.62	2.62	2.62	2.62

In addition to the identified federal formula and required matching funds designated in support of this program, a \$200,000 grant from the Office of Minority Health, HHS will provide specialized support for components of this Program. The project is multi-disciplinary and is implemented in multiple counties within the State. Multiple state comparison of data and dissemination of results is a requirement of the project.

## STAKEHOLDER INPUT

The Cooperative Agricultural Research Center uses several stakeholder input processes:

- 1) Joint Research and Extension field days and related activities (e.g., Annual Goal Field Day, County Extension
- 2) Co-sponsoring small farmers conferences - for several years we have co-sponsored the small farmers conference
- 3) Participation in the Texas A&M University System Agriculture Program initiatives:

- a) The Texas Agricultural Summit Initiative. The Texas Agricultural and Natural Resources Summit Initiative is an apolitical forum for people concerned about Texas' food, fiber, and natural resource system to meet and plan for a future we all share. The Initiative began in 1993 on the principle that Texans can find workable solutions to any challenge if given an open forum in which to share ideas. The Initiative purpose is to identify and resolve critical issues facing Texas agriculture by bringing together representatives from every sector and interest.

In 1993, Texas held the first-ever Texas Agricultural Summit with 450 participants representing agriculture, agribusiness, food industry, natural resources, consumers, government, academia and media. That event identified 15 high-priority issues facing Texas agriculture in the 21st century. Soon after, the Summit process spawned several regional mini-summits in Odessa, Lubbock, Temple, Dallas and Weslaco to propose solutions to 15 high-priority issues identified at the 1993 Summit. Simultaneously, the 21-member Summit Executive Committee consisting of leaders from agriculture and natural resources, developed an organizational structure for continuing the work and analyzed high-priority issues to determine the initial task forces. Members represent diverse stakeholder groups and recommend action plans and implementation procedures.

Four Issue Resolution Task Forces were initiated, including Water Rights; Food, Fiber and Natural Resource Systems Education; Agricultural Competitiveness; and Agricultural Leadership. These task forces were to identify and initiate additional task forces to address unresolved issues from the 1993 Summit and future Summit meetings. The Summit process also distributes task force recommendations to the media, public officials, educational institutions, state and federal agencies, commodity groups, producer organizations, and key business leaders.

The Agricultural Summit process seeks to continually explore new areas of concern by conducting statewide summits/conferences. The process consists of many people

working together including producers, processors/manufacturers, retailers/wholesalers, distributors, scientists, educators, government officials, environmentalists, and consumers. Issue resolution task forces are created to help identify and initiate additional task forces to address unresolved issues from the 1993 Summit and other Summit meetings. Task force recommendations are then distributed to the media, public officials, educational institutions, state and federal agencies, commodity groups, producer organizations, and key business leaders.

The following Summits were conducted after 1993:

Food Safety, Nutrition and Health Summit, December 1995

Farm Bill and Beyond Summit Conference, June 1996

Environmental and Natural Resource Policy for the 21st Century Summit  
Conference, November 1996

Rice Summit Conference, February 1997

Financing Texas Agriculture Summit Conference, May 1998

Texas Forestry: Preparing for the 21st Century, June 1999

Agricultural Biotechnology and Genomics Summit

To be conducted, September/October 1999

- b) Texas Community Futures Forum. The Texas Community Futures Forum (TCFF), is a statewide process begun in January 1999, that identifies priority issues and needs in all 254 Texas counties. A form of the TCFF has been used for long-range program planning since 1985, and is a broad assessment of needs sponsored by the Texas Agricultural Extension Service and the Texas A&M University System's network of county, district, and state faculty.

The TCFF engaged citizens, experts and staff from local and state agencies to plan for the next 3-5 years. The first TCFF meeting in each County was an Open Forum that included representative citizens, and used nominal group techniques to generate issues and assess their relative importance to the County. A list of prioritized issues was created and shared with other County stakeholders. The second TCFF County meeting was a Focus Forum led by trained facilitators. This group included the same citizens participants as in the Open Forum, plus local resource people, (experts, stakeholders, staff from other agencies and Extension staff), and further refined the prioritized County list of issues.

Calendar of Activities: Each County began TCFF with Phase I in October 1998 - January 1999 when County faculty established a plan for conducting the TCFF, set dates for Forum events, identified and talked with cooperating agencies, identified facilitators, and identified and invited participants. Phase II occurred during February -

March 1999 when Open Forums assessed needs of the community, county and region and experts were recruited to participate in the Focus Forum, and when Open Forum results were available and a briefing conference was scheduled to distribute the results of the Open Forum and recruit expertise for the Focus Forum. Open Forums each consisted of 30 - 36 individuals, through 50 individuals were occasionally accommodated, and one facilitator was used per 10 persons. In some larger counties, more than one Open Forum was held (e.g., in every precinct, or according to urban and rural delineations in the county). In this case, an additional forum was planned to aggregate the findings from the previous Open Forums. Representatives from each Open Forum were invited to the follow-up Open Forum. Open Forum participants included county judges, executive board chairs and another designated individuals from the various community in the county, organizations, clients of other agencies, racial/ethnic groups, women and men. In the Open Forum, the emphasis is on the end user, not necessarily the leadership of the county or community. Once needs and issues were identified, leaders and experts from the county and community were invited to participate in the Focus Forum to draft action plans to address the issues. Phase IV occurred during March-April 1999 when Focus Forums drafted action plans to address the needs identified in the Open Forum. Phase V occurred during May-June 1999 during which time Local Issue Teams worked with partnering agencies to address the needs identified for each issue, and the Planning Document was reviewed, revised, and finalized for the next four years.

Open Forum Process. Nominal group techniques were used as the facilitation technique during the Open Forum. A single question was supplied by the facilitators, and individuals trained as facilitators managed the group process. All participants answered the same question, and each group identified and ranked the list of items generated by this question. The top items from each group were reported and combined in a general session where participants voted again to produce a list of priority items. Outputs of the Open Forum included a prioritized list of citizen needs and a grouping of those needs into similar categories. The categories and the ranking of times allowed comparison of issues across counties and within regions. All information was summarized into a TCFF Report and distributed to citizens who participated in the Open Forum, key individuals in community agencies and organizations, County judges and commissioners; members of the Extension Program Council's executive board, legislators who represent the county in Austin, key leaders invited to participate in respective Focus Forums, and each Extension agent serving the county. The Report publicly shared the process and the information collected from the Open Forum, described the Open Forum process in the county, listed needs and concerns of the county as identified during the Open Forum process, and was a starting point for the Focus Forum.

Focus Forum Process. Focus Forums were the next step to address the needs identified in the Open Forum. Additional resource people were invited, and were briefed and informed about the structure for this meeting. The Open Forum was a need identification process, and the Focus Forum was an action planning process. At the conclusion of Focus Forums, counties had a planning document for setting directions for the next four years. Using a Small Group Option, 12 - 15 experts and key stakeholders were selected to attend the Focus Forum which was scheduled for about 2.5 hours. Using a step-by-step process led by the facilitator, these groups identified goals, objectives, and action steps, reconvened for a general assembly, and then adjourned. In the Large Group Option, 30-40 key individuals participated. All Focus Forums were based on the Open Forum Report, and addressed several high priority issues. Approximately 6-8 individuals with influence or expertise for each high priority issues were invited to attend each event. For example, 35 individuals attending an event would represent the highest four priorities in the Open Forum report, and four facilitators, one per high priority issue, would facilitate small groups. Each Focus Forum was scheduled for about 2-5 hours. The Extension agent provided local trend data for the county and some information related to the high priority issues.

## **THE PEER REVIEW PROCESS**

### 1) Merit Review

All funded projects, either Evans - Allen, Experiment Station (Hatch), or otherwise, undergo a scientific review process. Each scientist (or faculty) when submitting a proposal for funding support, must submit the name of at least two qualified individuals to provide technical review of the project. Additionally, the Research Director selects individuals to serve as members of an internal review panel in consultation with the University's Vice President for Research and Development. At minimum, three individuals review and evaluate each proposed project prior to approval for external submittal and/or internal fund allocation.

### 1. Scientific Peer Review

#### **MULTISTATE RESEARCH AND EXTENSION**

There is no currently ongoing multistate research. Several projects involving primarily the 1890's and USDA are under review. It is anticipated that one or more of these projects will be brought on line in FY 2000.

#### **INTEGRATED RESEARCH AND EXTENSION ACTIVITIES**

- \* Annual Goat Field Day
- \* County level farmers field day(s)
- \* Small Farmers Conference
- \* Jointly appointed Research Scientist/Extension Specialist in Beef Cattle
- \* Jointly appointed Research Specialist/Extension Specialist in 4 -H and Youth Development - Goats